REMARKS

Claims 1-21 are currently pending. Reconsideration of the application is requested in view of the remarks below.

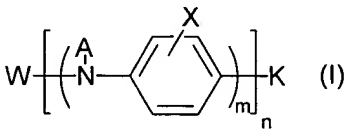
The Examiner rejected claims 1-21 under 35 U.S.C. § 102(b) as being anticipated by Brown et al., U.S. Patent No. 5,821,246 ("Brown").

Claim 1, an independent claim, will be discussed first. It covers a method of inhibiting the growth of tumor cells in a tumor site. The method is, a photodynamic tumor treatment, includes administering to a tumor site an effective amount of an oligoaniline, and subsequently exposing the tumor site to irradiation. The oligoaniline inhibits tumor growth by forming free radicals under irradiation.

The Examiner pointed out that "Brown et al. teaches inventions concerning the aniline of formula 1 (see Abstract)" and "[a] pharmaceutical composition containing the [aniline] compound can be used in the treatment of psoriasis or cancer (col. 28, lines 8-41)." See the Office Action, page 2, lines 13-17.

According to Brown, the anti-cancer properties possessed by certain aniline compounds are believed to arise from their Class I receptor tyrosine kinase inhibitory activity. See column 28, lines 8-41. Thus, at most, Brown discloses using aniline compounds to kill tumor cells by inhibiting the activities of an enzyme, i.e., receptor tyrosine kinase. By contrast, claim 1 is drawn to photodynamic tumor therapy, i.e., killing tumor cells with free radicals generated from an irradiated oligoaniline. In other words, claim 1 covers a method of killing tumor cells growths by a non-enzymatic method. Claim 1 is therefore not anticipated by Brown. Claims 2-17, depending from claim 1, are also not anticipated by Brown.

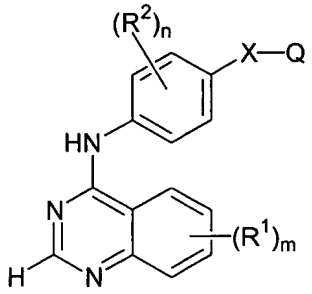
Claim 18 covers a pharmaceutical composition containing an oligoaniline of formula (I):



(I)

in which m, n, A, W, X, and K are defined in claim 18. More specifically, K is H or an arylamino group, in the 4-position of the aniline ring, containing at least one phenylene group bonded to the amino moiety of the arylamino group.

As correctly pointed out by the Examiner, Brown discloses a pharmaceutical composition containing a compound of the following formula:



in which X, a substituent in the 4-position of the aniline ring, can be selected from a list of functional groups. Among them, NR^3CO and NR^3SO_2 (in which R^3 is H or C_1-C_4 alkyl) are the only functional groups having structures most similar to the arylamino groups assigned to K, also a substituent in the 4-position of the aniline ring (see formula (I) above). However, these two groups are still substantially different from the arylamino groups assigned to K. Specifically, NR^3CO is a group in which an amino group is bonded to a carbonyl group and NR^3SO_2 is a group in which an amino group is bonded to a sulfonyl group. By contrast, K, as discussed above, at most is a group in which the amino group is bonded to a phenylene group, not a group in which the amino group is bonded to a carbonyl group or a sulfonyl group. Therefore, claim 18, as well as claims 19-21 dependent from it, is not anticipated by Brown.

As discussed above, claim 1, as well as claims 2-17 dependent from it, is drawn to a non-enzymatic method, instead of an enzymatic method as disclosed in Brown, and is therefore not anticipated by Brown. Note that the method of claim 1 uses an oligoaniline of formula (I). Thus, claim 1, as well as its dependent claims 2-17, is also not anticipated by Brown for the facts and reasons set forth in the two preceding paragraphs.

CONCLUSION

Applicant submits that the ground for rejection asserted by the Examiner has been overcome, and that claims 1-21, as pending, define subject matter that is novel. On this basis, it is submitted that all claims are now in condition for allowance, an action of which is requested.